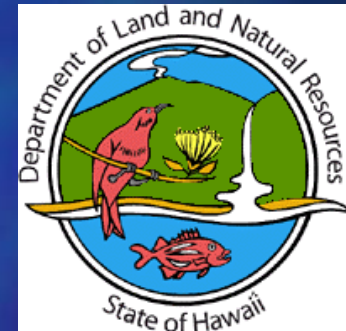
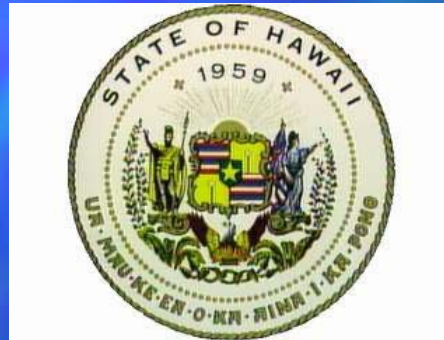


State Recommended Changes For Bottomfish Restricted Fishing Areas in the Main Hawaiian Islands



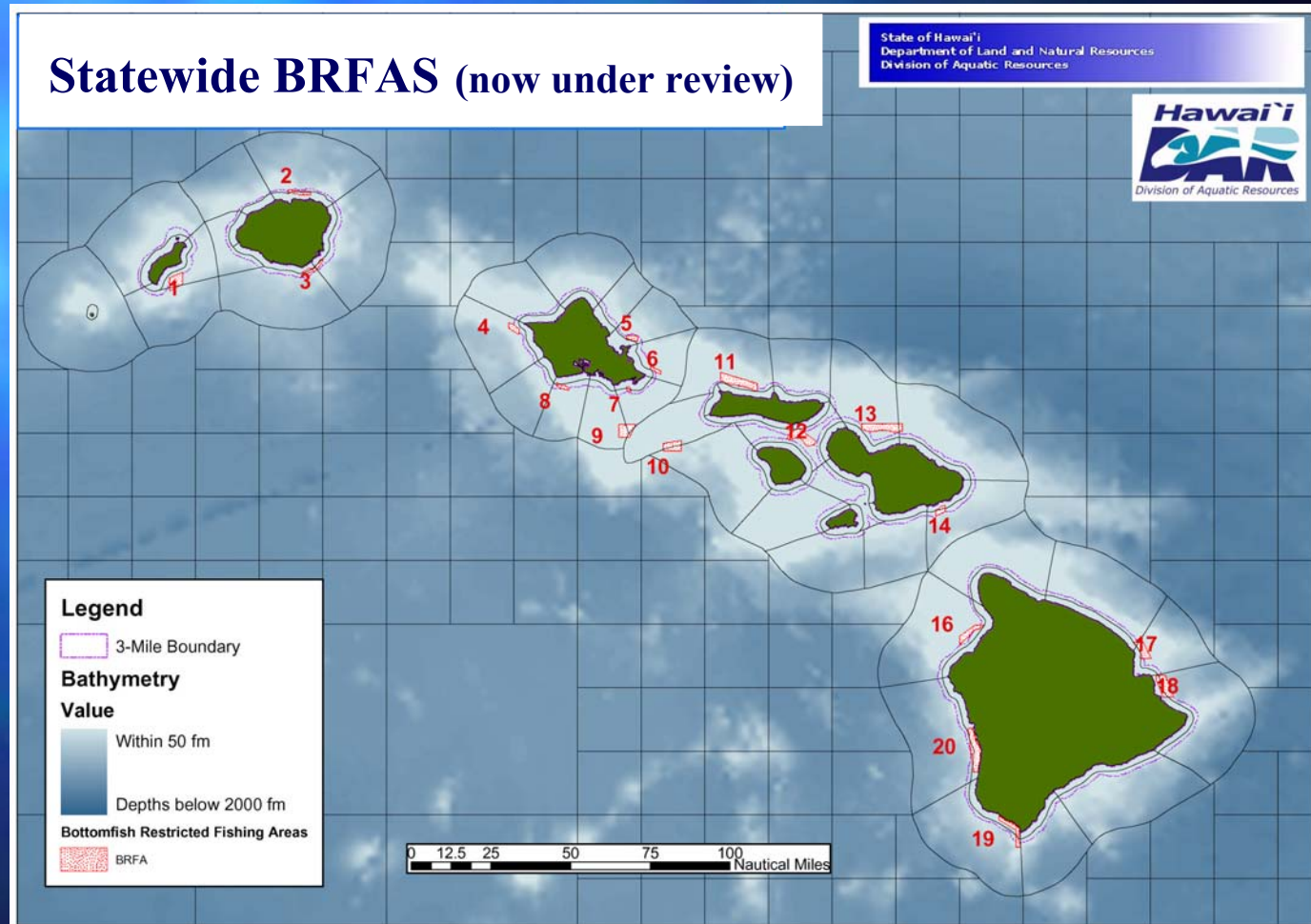
Bottomfish Restricted Fishing Areas in the Main Hawaiian Islands (MHI)

- In July 1998, DLNR established the Bottomfish Restricted Fishing Areas (BRFAs) because a federal assessment indicated MHI bottomfish stocks were approaching an over-fished condition
- In 2005, a new federal assessment indicates MHI bottomfish stocks are still in a state of over-fishing
- An additional 15% reduction in present-day fishing effort is required to remedy this over-fished status



The 19 Existing MHI BRFAs

- Ni'ihau (1)
- Kauai (2)
- O'ahu (5)
- Penguin Bank (2)
- Moloka'i (1)
- Lāna'i (1)
- Maui (2)
- Hawai'i (5)



Evaluating the Existing BRFAs Fishery Impacts

The fishery evaluation included:

- Analyze changes in commercial catch and effort data (lbs caught, trips, numbers of fishers) before and after BRFAs established
- Assess impacts to fishers (increased distance to fish, weather, vessel size, accessibility/safety issues, ...)
- Consider enforcement aspects (feasibility, cost & ease of enforcement)

Evaluating the Existing BRFAs Habitat Quality

The habitat evaluation included:

- Map Bottomfish Habitat Depth Range (BHDR)
(areas with depths between 50-200 fathoms)
- Map Potentially Important Habitat Areas (PIHA)
(areas with underwater features ... pinnacles, cliffs, slopes, etc.,)
- Search for Presence/Absence of Bottomfish
Species in PIHA (via camera drops and fishing surveys)

DLNR/DAR's Evaluation of Existing BRFA's Considered:

- Total Catch (Average Total Annual Catch)
- Catch Rate (Lbs/Trip)
- Impacts on Use Levels (Fishers/Trips)
- Presence of suitable Habitat, Depth Ranges and Bottomfish Species (adults & juveniles)
- Potential for Spillover to Adjacent Areas
- Weather Accessibility & Importance of the Area to Fishers by Vessel Size (negative social impacts)
- Visibility (for enforcement)

We Found Room for Improvement!

Effective=
Green

Okay=Yellow

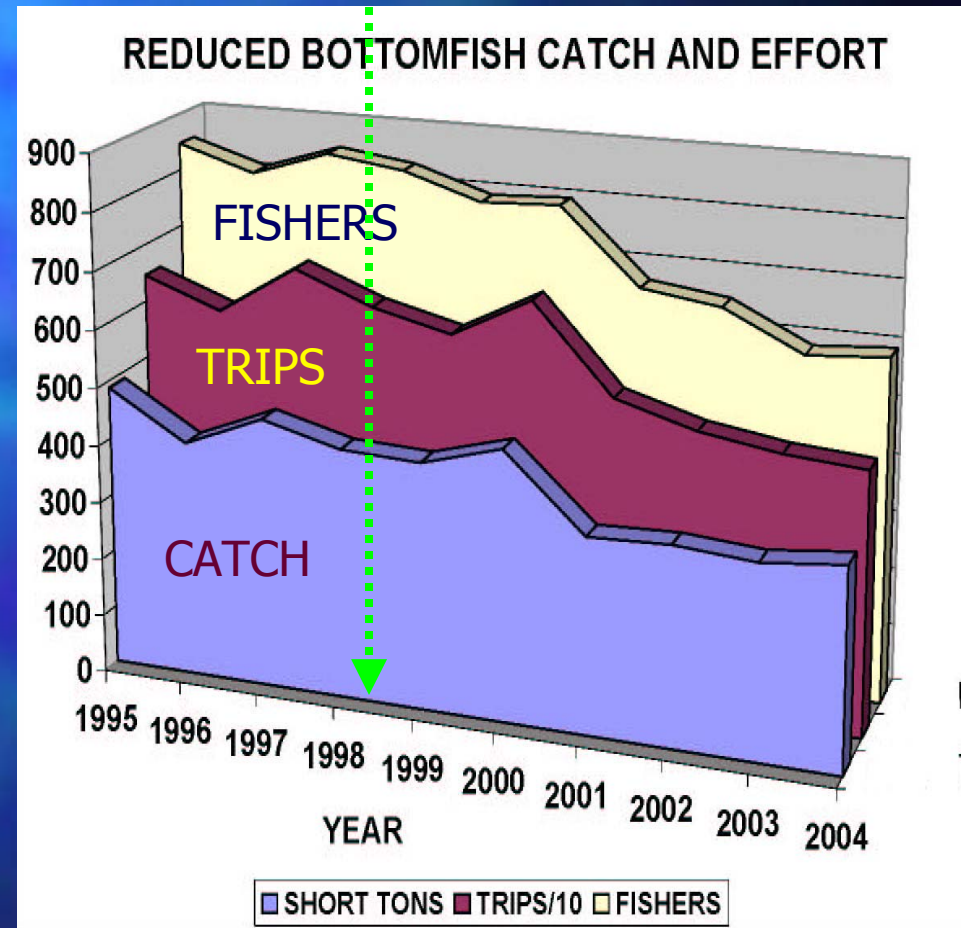
Poor=Red

BFRA Evaluation Matrix Summary										
BFRA	TOTAL CATCH INDEX	CATCH RATE INDEX	USE IMPACT INDEX	HABITAT INDEX	DEPTH RANGE INDEX	SPECIES PRESENCE INDEX	JUVENILE & SPILLOVER POTENTIAL	WEATHER ACCESSIBILITY AREA LOSS INDEX	ENFORCEMENT VISIBILITY	TOTAL SCORE
1	Red	Green	Yellow	Red	Yellow	Green	Green	Yellow	Yellow	Green
2	Yellow	Green	Red	Green	Red	Yellow	Green	Green	Yellow	Green
3	Yellow	Red	Red	Yellow	Red	Yellow	Green	Yellow	Yellow	Red
4	Red	Green	Red	Red	Red	Red	Green	Red	Yellow	Red
5	Red	Red	Yellow	Red	Red	Yellow	Yellow	Red	Green	Red
6	Red	Red	Green	Red	Red	Red	Yellow	Yellow	Green	Red
7	Red	Green	Red	Red	Red	Yellow	Red	Red	Green	Yellow
8	Green	Green	Red	Red	Red	Yellow	Yellow	Red	Green	Yellow
9	Red	Red	Red	Yellow	Red	Green	Green	Yellow	Red	Red
10	Yellow	Yellow	Red	Red	Yellow	Green	Green	Yellow	Red	Yellow
11	Red	Red	Red	Red	Green	Red	Red	Yellow	Yellow	Red
12	Yellow	Red	Red	Yellow	Red	Yellow	Red	Green	Yellow	Yellow
13	Green	Green	Red	Red	Green	Red	Red	Yellow	Green	Yellow
14	Red	Green	Green	Yellow	Red	Green	Green	Yellow	Yellow	Green
16	Red	Red	Red	Red	Green	Yellow	Red	Yellow	Yellow	Red
17	Yellow	Red	Red	Green	Green	Yellow	Red	Yellow	Green	Yellow
18	Yellow	Green	Red	Red	Red	Green	Red	Yellow	Yellow	Red
19	Red	Red	Red	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Red
20	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Green	Green

Commercial Landings Data* Indicate

- **29% Less Fishers**
(socio-economic impacts)
- **30% Less Bottomfish Trips** (reduced “fishing effort”) since BRFAs implemented
- **23% Less Catch** (BRFAs may be helping to reduce overfishing... catch trends influenced by many factors)

Pre-Area Closure Post-Area Closure

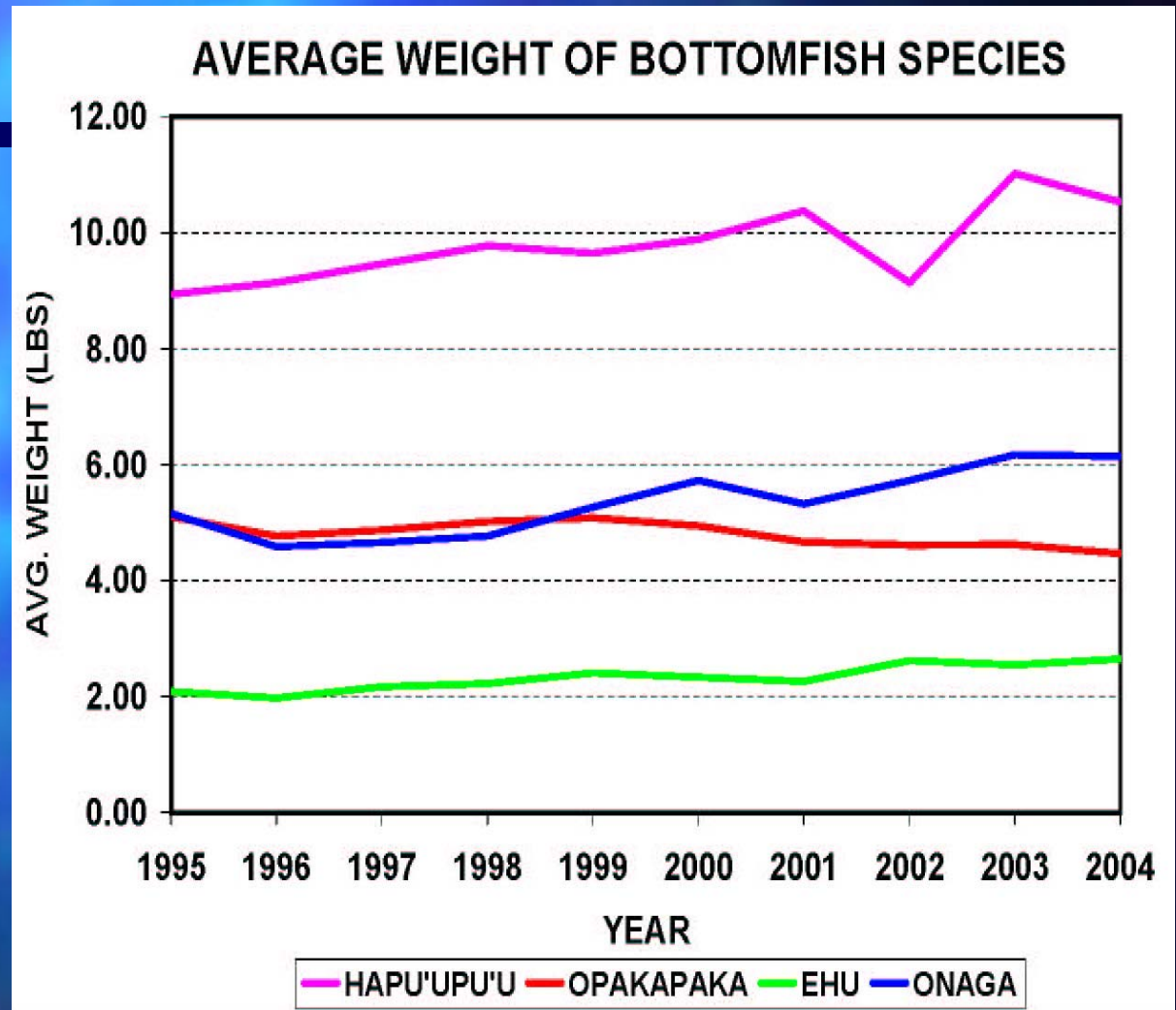


* Data From All Commercial Bottomfishers, based on mean 1994 -1997

Commercial Landings Data* Indicate

- **Fish are Getting Bigger**

Mean weight increases for ehu, onaga, hapu'upu'u, may indicate stocks improving



* Data From Commercial "High-Liners" Only

But, we are not there yet!

According to federal assessment, an additional 15% reduction in fishing effort is needed

- Continue BRFAs, but
- Improve the amount of good quality bottomfish habitat within BRFAs to reduce the number of areas needed and make them more effective.

State and Federal Bottomfish Plans

State Plan

- Modify BRFA's
- Include exemptions for overlapping fisheries
- Keep existing recreational limits
- Keep BF registration

Federal Plan

- WESPAC to present their management alternatives

Bottomfish Species Included in State Plan*

- 'Ula'ula koa'e / Onaga



- Ehu



- Opakapaka



- 'Ukikiki / Gindai



- Kalekale



- Hapu'upu'u



- Lehe



* Note: Federal Plan also includes eight other species

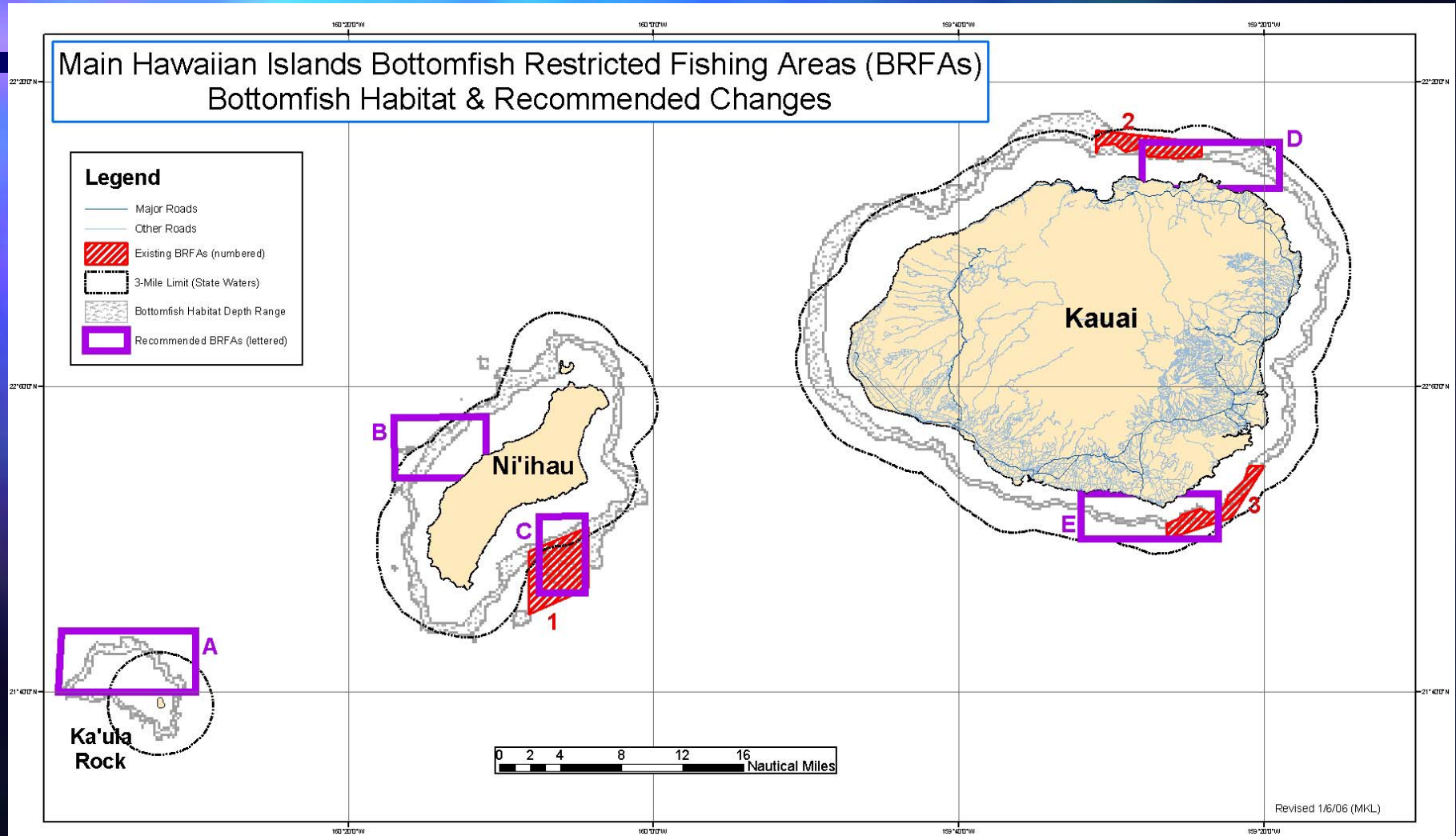
DLNR Recommended BRFA Changes

- Several existing areas have been removed
- Some areas have been enlarged & moved
- Some areas are completely new
- Most areas contain some Federal Waters
(might satisfy some of WESPAC's needs)

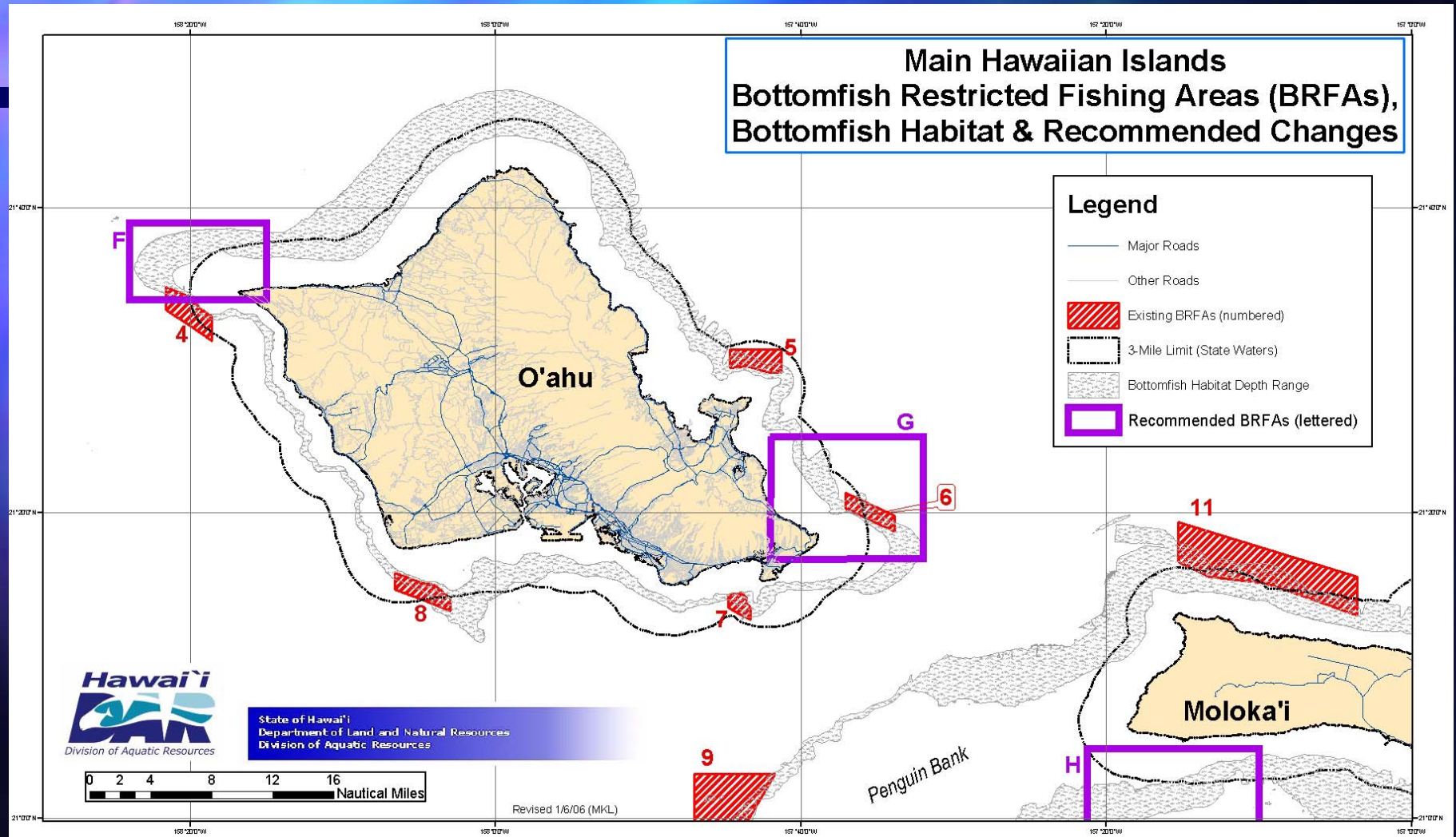
Goals for New BRFAS

- Make areas with straight-line boundaries for easier location
- Move areas closer to shore to assist enforcement from shore
- Include more quality bottomfish habitat within BRFAs
- Target ehu and onaga habitats
- Reduce fishing effort by 15%
- Minimize socio-economic impacts while maximizing benefits to fish stocks

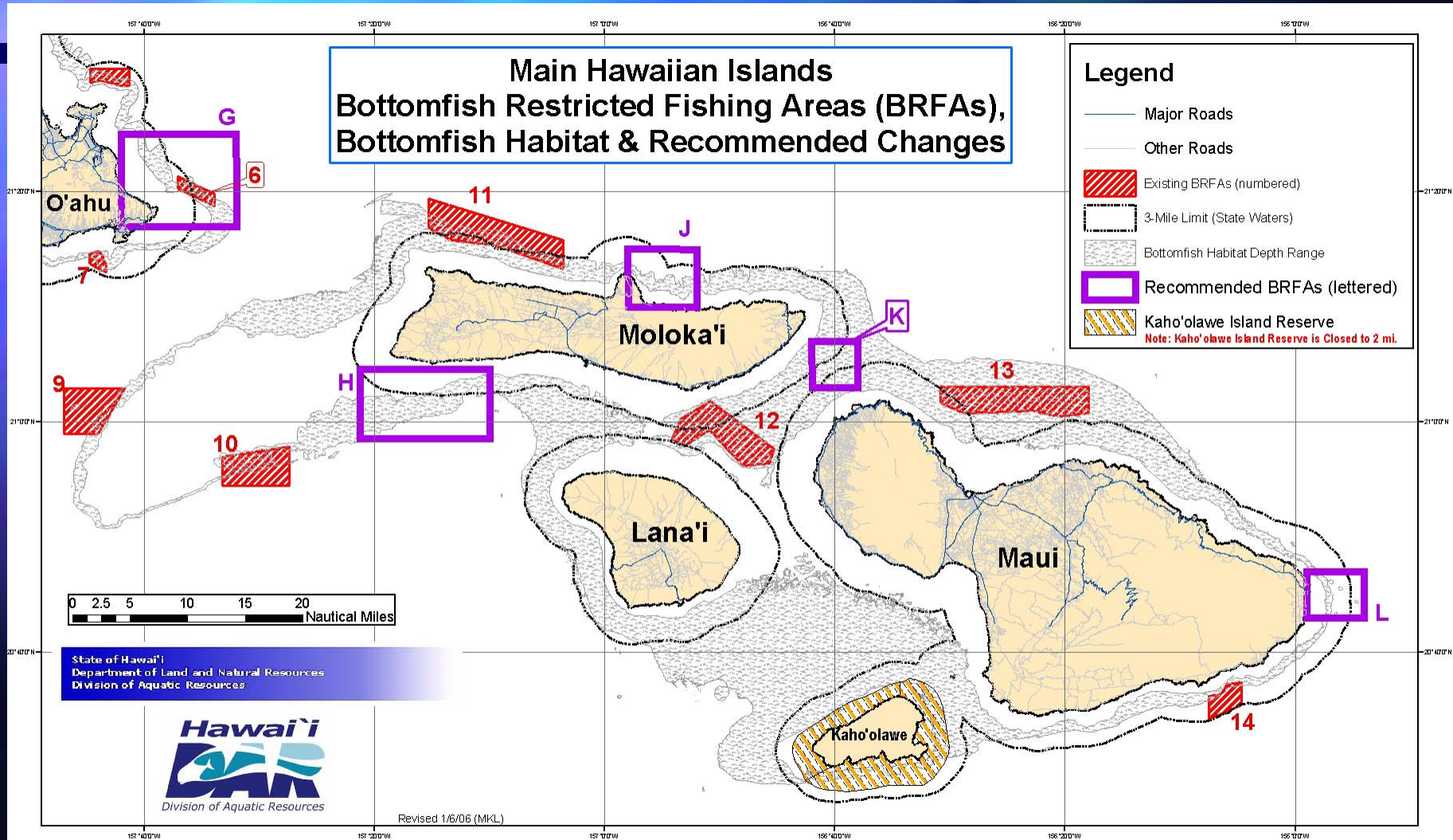
RECOMMENDATIONS: Kauai County



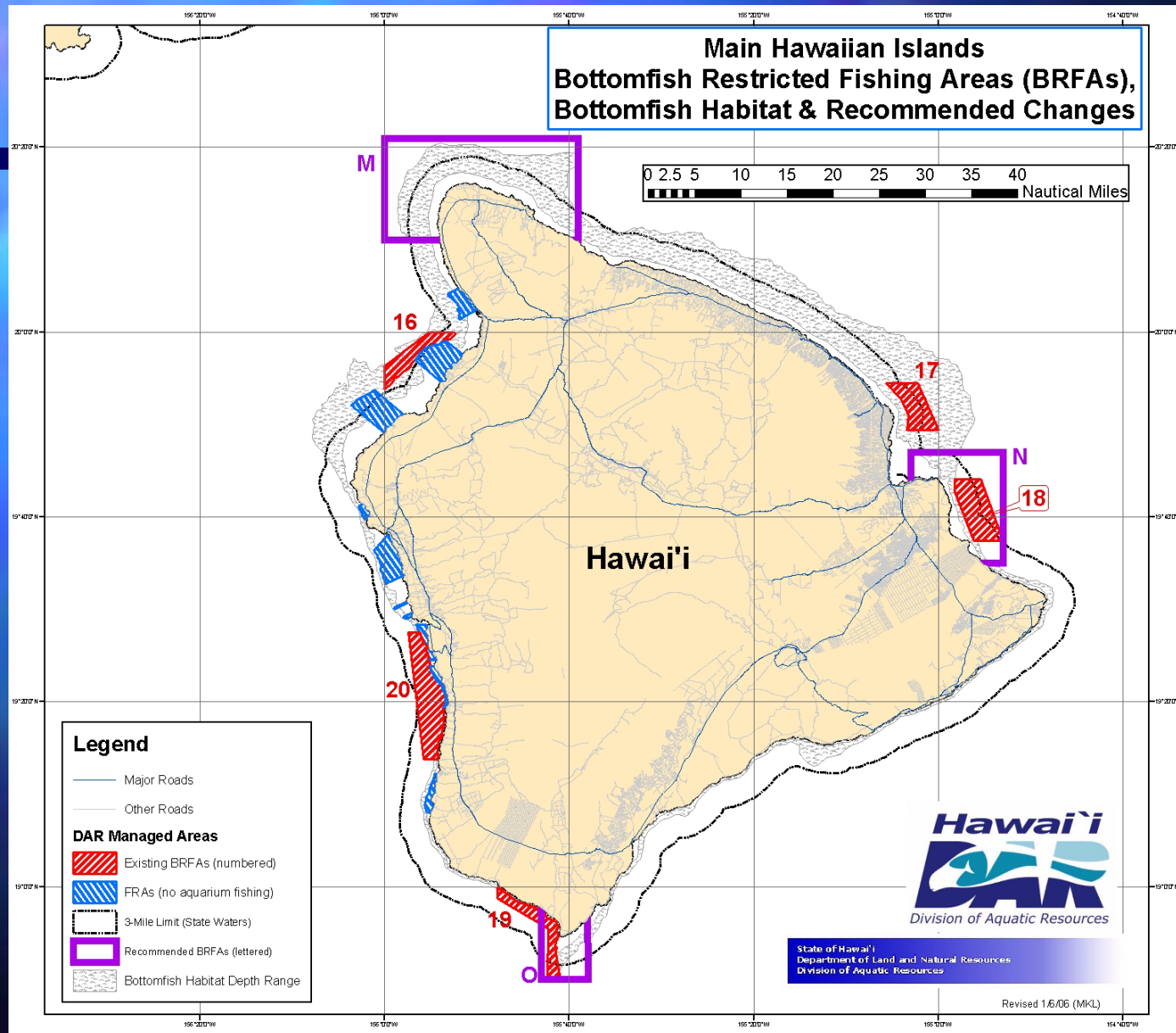
RECOMMENDATIONS: O'ahu



RECOMMENDATIONS: Maui County



RECOMMENDATIONS: Hawai'i County



Comparison of Existing BRFAs to New BRFAs, As Recommended

- Total number BRFAs reduced from 19 to 14
- Area of Bottomfish Habitat Depth Range (BHDR) covered increased from 7.5% to 13%
- Number of Potentially Important Habitat Areas (PIHA) increased from 11% to 25%

DLNR/DAR has better information now to design better BRFAs

- We'd like to know what you think before going any further
- You have this opportunity to provide your thoughts on these recommended BRFAs
- If you recommend changes to these areas, please be specific

State and Federal regulations are administered separately:

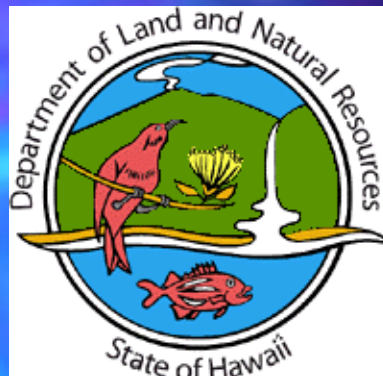
- WESPAC proposes Federal regulations
- DLNR proposes State regulations

We Want Your Comments!



- Make sure your voice is heard
- We will consider all comments
- Please fill out a survey.
- You can also mail surveys
(address on the back of the survey!)
- Return surveys by February 17, 2006

What's Next?



- DLNR will consider public comments and make final recommendations
- DLNR will formally draft State regulations based on these final recommendations
- DLNR will schedule statewide public hearings to gather final public comments
- New regulations will become effective in about one year

Statewide Meeting Schedule

Bottomfish Meeting Schedule for January 2006

Wespac (Federal) Bottomfish Scoping Meetings

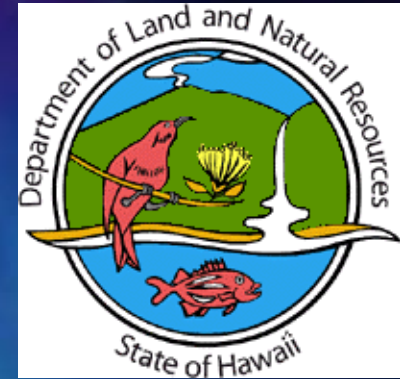
<i>Date</i>	<i>Island</i>	<i>City/Town</i>	<i>Place</i>	<i>Time</i>
01-06-06	Moloka'i	Kaunakakai	Mitchell Pauole Center Conference Room	6-9:00 pm
01-07-06	Lāna'i	Lāna'i City	Lāna'i High & Elementary School Cafeteria	6-9:00 pm
01-09-06	Hawai'i	Hilo	UH Hilo Campus Center, Rm 306	6-9:00 pm
01-10-06	Hawai'i	Kailua-Kona	King Kamehameha Hotel	6-9:00 pm
01-11-06	Maui	Kahului	Maui Beach Hotel	6-9:00 pm
01-12-06	O'ahu	Honolulu	Ala Moana Hotel	6-9:00 pm
01-13-06	Kauai	Lihue	Chiefess Kamakahelei Middle School	6-9:00 pm

* Dates shaded in gray will include a presentation by DLNR/DAR staff on State Bottomfish Restricted Fishing Areas (BFRAs)

Additional DLNR/DAR (State) Bottomfish Informational Meetings

<i>Date</i>	<i>Island</i>	<i>City/Town</i>	<i>Place</i>	<i>Time</i>
01-17-06	O'ahu	Wai'anae	Wai'anae Public Library	6-8:00 pm
01-19-06	O'ahu	Kāne'ohe	He'eia State Park	6-8:00 pm
01-19-06	Kauai	Port Allen	Port Allen Boat Club	6-8:00 pm
01-20-06	Kauai	Hanalei	Hanalei Elementary School	6-8:00 pm
01-23-06	Maui	Hāna Bay	Helene Social Hall	6-8:00 pm
01-24-06	Moloka'i	Kaunakakai	Mitchell Pauole Center Conference Room	6-8:00 pm
01-26-06	Lāna'i	Lāna'i City	Lāna'i Public Library	6-8:00 pm
01-27-06	O'ahu	Hale'iwa	Hale'iwa Surf Center	6-8:00 pm

For More Information:



If you still have questions about
State BRFAs, contact:

Alton Miyasaka

587-0092